

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A stator for an electromagnetic pump comprising:
a cylinder whose both end faces are respectively closed by a pair of frames;
a movable member having a magnetic body, in which flange sections are formed at both axial ends and outer circumferential faces of the flange sections act as magnetic flux working surfaces, said movable member being accommodated in said cylinder and capable of reciprocally moving in the axial direction thereof;

pump chambers being respectively formed between inner faces of the frames and both side faces of said ~~moving~~ movable member extended in the moving direction thereof; and

an air-core electromagnetic coil-coils which are wound in opposite directions being fitted around a periphery of said cylinder, ~~characterized in,~~

~~that axial end faces of said electromagnetic coil are provided with yokes made of a magnetic material~~

wherein yokes made of a magnetic material are provided to end faces of the electromagnetic coils to face the flange sections of the movable body;

an outer yoke encloses outer faces of the yokes;

a spacer made of a nonmagnetic material or an air space is provided between adjacent yokes, and

wherein the movable member is reciprocally moved according to a magnitude relation between magnetic attraction forces which work to the movable member and are generated by magnetic circuits formed between the flange sections and the adjacent yokes and between the flange sections, the end yoke, the outer yoke and the adjacent yokes when an electric current is supplied to the electromagnetic coils.

2. (Canceled)

3. (Canceled)

4. (Canceled)

5. (New) The stator according to claim 1, wherein the yokes of the electromagnetic coils are extended toward inner faces of the electromagnetic coils which face the flange sections of the movable member.

6. (New) A stator for an electromagnetic pump comprising:

a cylinder whose both end faces are respectively closed by a pair of frames;

a movable member having a magnetic body, in which flange sections are formed at both axial ends, outer circumferential faces of the flange sections act as magnetic flux working surfaces, said movable member being accommodated in said cylinder and capable of reciprocally moving in the axial direction thereof;

pump chambers being respectively formed between inner faces of the frames and both side faces of said movable member extended in the moving direction thereof;

electromagnetic coils which are wound in opposite directions being fitted around a periphery of said cylinder; and

yokes made of a magnetic material provided to end faces of the electromagnetic coils to face the flange sections of the movable body.

7. (New) The stator of claim 6, wherein

the yokes comprise an outer yoke,

a pair of end yokes depending from the outer yoke, and

a pair of adjacent yokes depending from the outer yoke and located between the end yokes.

8. (New) A stator for an electromagnetic pump comprising:

a cylinder whose both end faces are respectively closed by a pair of frames;

a movable member having a magnetic body, said movable member being accommodated in said cylinder and capable of reciprocally moving in the axial direction thereof;

pump chambers being respectively formed between inner faces of the frames and both side faces of said movable member extended in the moving direction thereof;

electromagnetic coils which are wound in opposite directions being fitted around a periphery of said cylinder; and

yokes made of a magnetic material provided to end faces of the electromagnetic coils to face the flange sections of the movable body, the yokes comprise an outer yoke, a pair of end yokes extending from the outer yoke and a pair of adjacent yokes depending from the outer yoke and located between the end yokes.

9. (New) The stator of claim 8, further comprising:

flange sections formed at both axial ends of the movable body; and

outer circumferential faces of the flange sections act as magnetic flux working surfaces.

10. (New) The stator of claim 8, further comprising a spacer made of a nonmagnetic material or an air space is provided between the adjacent yokes.